

Date: Friday, 7/14/2006 12:01:27 PM
 User: Kirn Johnston

Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : TOW RING
 Job Number : 27924
 Estimate Number : 10396
 P.O. Number : N/A Part Number : D2968041
 This Issue : 7/14/2006 S.O. No. : N/A Drawing Number : D2968
 Prsht Rev. : NC Project Number : N/A
 First Issue : N/A Type : MACHINED PARTS Drawing Revision : B1
 Previous Run : 26210 Material : N/A
 Due Date : 8/20/2006 Qty: 40 Um: Each
 Written By : KA
 Checked & Approved By : 06.07.14
 Comment : Est:C 03:04.11 Reformat; Incorporated D2968-1/-5 KJ/RF

Additional Product

Job Number:



Seq. #:

Machine Or Operation:

Description :

1.0

27924A

STEM



B27924A



Comment: Sub-Component STEM

M 06/08/22

(41)

2.0

27924B

RING



B26210B



Comment: Sub-Component RING

M 06/08/22

(41)

3.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Weld D2968-1 & D2968-5 as per Dwg D2968 & QSI 004 using 4130 welding rod Identify as D2968-041

Batch: M15084

M 06/08/22

(41)

4.0

QC5/9

WELD INSPECTION



Comment: WELD INSPECTION

PD 06-08-22 (41)

5.0

PG

PURCHASING



Comment: PURCHASING

Issue P/O: 1905

C 206/08/23 (41)

Description: D2968-041 to heat treat to ultimate tensile strength

125ksi as per Dwg D2968

Conformity sheet required

Issue P/O: 1906

C 206/08/23 (41)

Cad Plate per QQ-P-416F Class I Type II

Conformity sheet required

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ Date: 06/09/29

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

Date:
User:

Friday, 7/14/2006 12:01:27 PM
Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: TOW RING

Job Number: 27924

Part Number: D2968041

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage

Ensure certificate of conformity is attached

P 11/4/9/20 41

7.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT CAD PLATE

u 06/09/20

8.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.2) as per QSI 005 4.3

DO NOT POWDER COAT THREADS

a.m 06-09-28 (41)

9.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

FL 06 09 28 (41)

10.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: *57113*

P 11/4/9/29 (41)

11.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

D 06/09/29 (41)

Job Completion



u 06/09/29

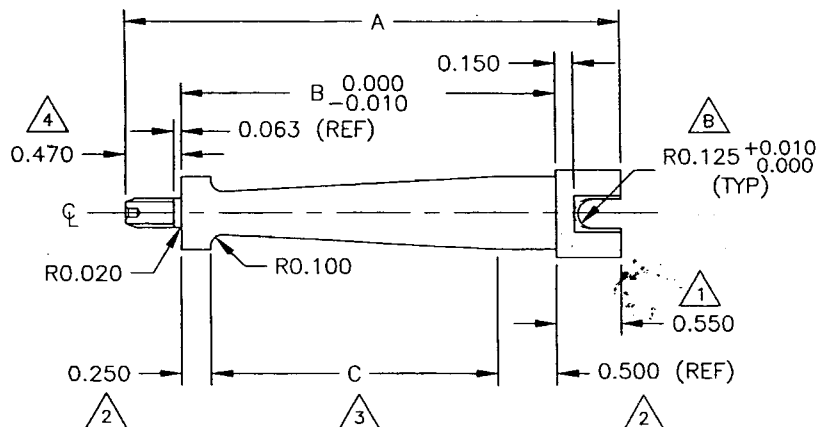
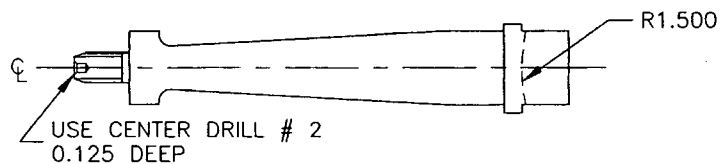
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____



PART NUMBER	A	B	C
D2968-1	5.040	4.020	3.270
D2968-3	4.200	3.180	2.430

D2968-1/-3 STEM

D2968-1 AND D2968-3 STEM:

MATERIAL: AISI 4130

△ 0.750 O.D.

△ 0.625 O.D.

△ MACHINE UNIFORM TAPER FROM 0.363 O.D. TO 0.625 O.D.

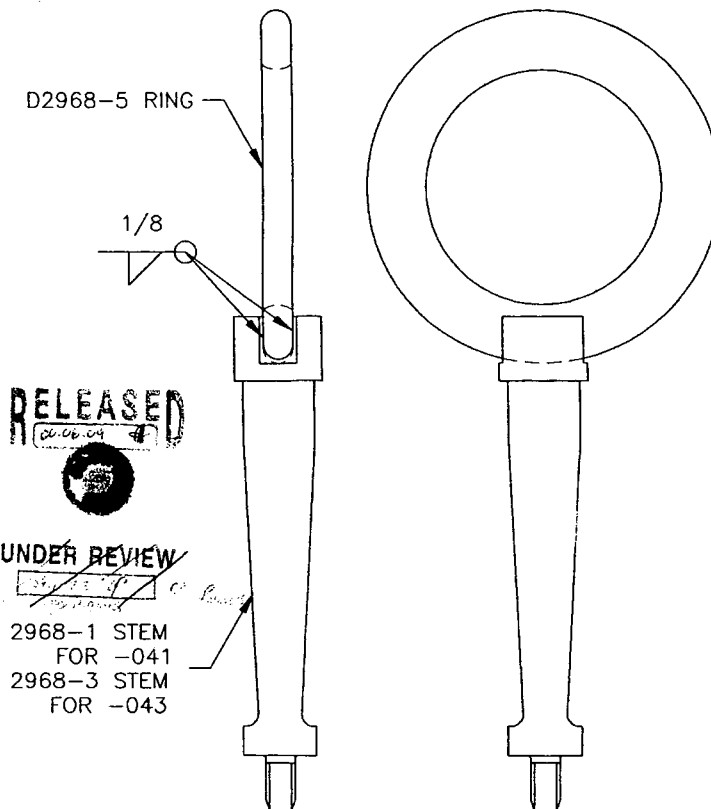
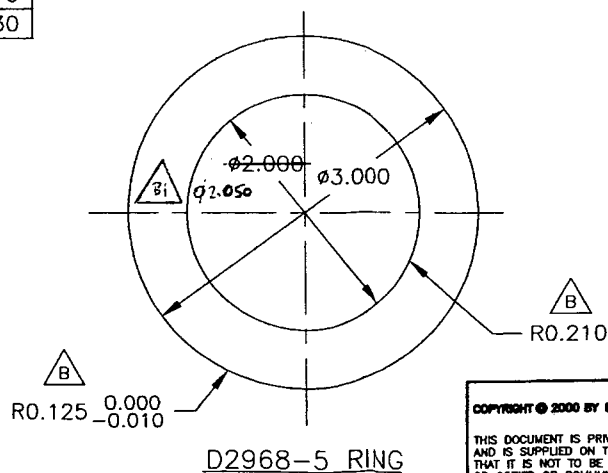
△ 1/4-28 UNF THREAD WITH 0.063 GRIP
MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
UNLESS OTHERWISE INDICATED

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

D2968-5 RING:

MATERIAL AISI 4130

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED



RELEASED

UNDER REVIEW

USE 2968-1 STEM
FOR -041
USE 2968-3 STEM
FOR -043

D2968-041 AND D2968-043 TOW RING:

WELD PER QSI 004 ON ALL EDGES BETWEEN STEM AND RING
HEAT TREAT TO MIN ULTIMATE TENSILE STRENGTH OF 125 KSI

FINISH: CAD PLATE ENTIRE ASSEMBLY PER

QQ-P-416F CLASS I TYPE II

POWDER COAT WHITE (REF 4.3.5.2) PER DART

QSI 005 4.3 (EXCEPT THREADS)

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

B	00.05.31	R0.125 AND R0.210 WERE 0.060 x 45°
A	00.03.07	NEW ISSUE
DESIGN	DRAWN BY	DART DART AEROSPACE LTD. HARRISBURG, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO. D2968
DATE	00.05.31	TITLE TOW RING

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AND IS SUPPLIED ON THE EXPRESS CONDITION
THAT IT IS NOT TO BE USED FOR ANY PURPOSE
OR COPIED OR COMMUNICATED TO ANY OTHER
PERSON WITHOUT WRITTEN PERMISSION FROM
DART AEROSPACE LTD.

WORK ORDER
NO. 27924
SHOP COPY
RETURN TO
ENGINEERING
CONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE

9710166 2.050 WAS 2.000

MANCO DOMPLEX

8895 Crescent 3
Anjou (Québec) H1J 1B6
Tél.: 514-355-7867
Fax: 514-355-8750

CERTIFICAT DE CONFORMITÉ CERTIFICATE OF COMPLIANCE

7132

Dant Aerospace LTD
Client / Customer

D2968-041 B27924
de la pièce / part

P01906
Votre # de commande / Your purchase order #

100397
Notre # de bon de livraison / Our packing slip #

Inspecteur / Inspector <u>Renault</u>		Date, équipe / Date, shift <u>Sept 19, 2006</u>	
Placage / Plating <u>CADMIUM yellow QQ P-416 F CLASS 1 Type II</u>			
Quantité totale / Total quantity <u>41</u>		Quantité inspectée / Inspected quantity <u>41</u>	
Adhésion / Adhesion <u>Good</u>			
Épaisseur / Thickness		Moy. / aver.	
L.C.D. <u> </u>		H.C.D. <u> </u>	
Coulisses, taches / Leach, spots <u>NO</u>		Rugosité / Roughness <u>NO</u>	
Quantité approuvée / Approved quantity <u>41</u>		Quantité rejetée / Rejected quantity <u> </u>	

Commentaires / Comments

Nous certifions que les pièces énumérées ci-dessus ont été faites en conformité avec vos dessins et spécifications et rencontrent les exigences contenues dans ces dessins et/ou spécifications.

We hereby certify that the parts listed above have been made in accordance with your drawings and specifications and are correct to the requirements contained in those drawings and/or specifications.

Signé au nom de
Signed on behalf of

**MANCO
DOMPLEX**



VAC AERO
INTERNATIONAL INC.

RELEASE NOTE

GST No.: R105468102

OAK 78660-2



HEAD OFFICE
1371 SPEERS ROAD, OAKVILLE, ONTARIO
CANADA L6L 2K5
TEL: (905) 827-4171 FAX: (905) 827-7489



2009 WYECROFT ROAD, UNIT B
OAKVILLE, ONTARIO
CANADA L6L 6J4
TEL: (905) 827-7377 FAX: (905) 827-1380



QUEBEC DIVISION
7450 RUE VERITÉ STREET, ST. LAURENT, QUEBEC
CANADA H4S 1C5
TEL: (514) 334-4240 FAX: (514) 334-6269

09/14/2006

MM/DD/YYYY

PAGE: 1

BILL TO:

1DAR01
DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY, ON

SHIP TO: MANCO DAMPLEX
4650 HICKMORE
ST. LAURENT, QC

K6A 1K7

H4T 1K7

DATE SHIPPED	SHIP VIA	F.O.B.
09/14/2006	PUROLATOR 7684382	ORIGIN
CUSTOMER P/O No.	JOB No.	TERMS
PO00001905		COD

PART No.	DESCRIPTION	UOM	QTY ORD	QTY SHPD	TEST RESULTS
D2968-041	TOW RING	EA	41	41	
Process Specifications: Procedure: 3906 HEAT TREATED TO 125 KSI MIN. 100% HARDNESS TESTED PER ASTM E-18 HRC 27-32.5 MATERIAL: 4130 B27924					
NOTE: PARTS TO BE SHIPPED TO MANCO DAMPLEX					

100% HARDNESS TESTED

41 PCS → 31/32 HRC

VALO
TH.
27
Q.C.

I hereby certify that the material covered by this release note has been inspected and tested and conforms to all specifications relevant thereto in accordance with the conditions of the contract / or purchase order.

ON BEHALF OF VAC AERO INTERNATIONAL INC.

Authorized Q.C. Inspector

VALO
TH.
27
Q.C.



HEAT
TREATING

VACUUM BRAZING - HEAT TREATING - SPECIAL PROCESSING - FURNACE EQUIPMENT
THERMAL COMPONENT OVERHAUL - PLASMA AND OTHER COATINGS

